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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/721,441	11/22/2000	Steve Beck	291508005US1	2327

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EXAMINER	
CARLSON, JEFFREY D	
ART UNIT	**PAPER NUMBER**
3622	

DATE MAILED: 10/22/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/721,441	Applicant(s) BECK ET AL.	
	Examiner Jeffrey D. Carlson	Art Unit 3622	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *23 January 2004*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *15,18-26 and 30-34* is/are pending in the application.

4a) Of the above claim(s) *18-26* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *15 and 30-34* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☒ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. This action is responsive to the paper(s) filed 1/23/04 and the interview of 9/23/04.

Claim Objections

2. Claim 31 is objected to because of the following informalities:

- Claim 31 line 10. "message" should be replaced by --messages-- for clarity.

Appropriate correction is required.

Claim Rejections - 35 USC § 101

3. 35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

4. Claim 15 is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Claim 15 attempts to set forth a data structure claim, but merely sets forth a collection of data elements which are taken to be non-functional descriptive material and therefore provides only a mere arrangement of data. See MPEP 2106 IV B 1:

> Descriptive material can be characterized as either "functional descriptive material" or "nonfunctional descriptive material." In this context, "functional descriptive material" consists of **data structures** and computer programs which impart functionality when employed as a computer component. (**The definition of "data structure" is "a physical or logical relationship among data elements, designed to support specific data manipulation functions."** The New IEEE Standard Dictionary of Electrical and Electronics Terms 308 (5th ed. 1993).) "Nonfunctional descriptive material" includes but is not limited to music, literary works and a compilation or mere arrangement of data.
>
> ...
>
> When nonfunctional descriptive material is recorded on some computer-readable medium, it is not statutory since no requisite functionality is present to satisfy the practical application requirement. Merely

claiming nonfunctional descriptive material stored in a computer-readable medium does not make it statutory.

The following clarifies what the examiner believes the claim positively defines: The data identifying a user's test group is set forth. The language describing *how* the user was assigned to the test group does not further define the data identifying a user's test group. As written, the language regarding conditions to be applied appears to set forth intended use. Examiner suggests deleting "the identified test group indicating which of a plurality of" language so that language such as "sequences of conditions to be applied when..." will at least positively set forth such conditions as data in the computer memory. The claim paragraph regarding the subgroups is similarly analyzed. As such, claim 15 sets forth the following data elements: a user's test group, a user's subgroup. If the suggested changes were made, the data elements of sequences of conditions would also be positively part of claim 15. That being said, the claim would still lack "data structure" which imparts functionality when employed as a computer component and would still merely be a collection of data elements comprising non-functional descriptive material. There is no data structure in the claim and applicant's *desire* for the conditions to be applied does not provide any structure or relationship among data elements designed to support specific data manipulation functions.

Examiner believes that in general, examples of a data structure's "relationship among data elements designed to support specific data manipulation functions" can be object-oriented structures, a hierarchy of folders, pointers to data, etc., that help the processor find and use the stored, interrelated data elements. See *In re Lowry*, 32 F.3d

1579, 1583-84, 32 USPQ2d 1031, 1035 (Fed. Cir. 1994) (claim to data structure stored on a computer readable medium that increases computer efficiency held statutory).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 15, 30 and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Langheinrich et al (US6654725) in view of Benson (US6470079).

Regarding claims 15, 30, Langheinrich et al teaches prior techniques of allowing advertisers to specify targeting constraints that limit the display of an advertisement banner to certain conditions. The system checks the conditions and filters out all non-applicable ads for the current browser ad request/opportunity. An ad is then chosen randomly from the pool of remaining applicable ads. The conditions may include conditions such as: type and version of browser, OS, originating site, country, time of day, day of week [1:33-46]. Langheinrich et al states that filtering techniques allow for very precise targeting [2:26-30] and it would have been obvious to one of ordinary skill at the time of the invention to have provided an ad campaign with a series of conditions to be checked to enable constraining of the available ads to a few highly targeted, applicable ads in order to provide the precise targeting for a variety of parameters. Such a campaign essentially provides a single group whereby each condition is tested

and satisfied conditions are associated with their applicable ads. The random selection from among the applicable ads provides random selection of "subgroups" and results in the "treatment" of the display of the randomly selected ad. Langheinrich et al does not teach more than one simultaneous campaign/group. Benson teaches the idea of running simultaneous advertising campaigns to which users are exposed. The results and effectiveness of the simultaneous campaigns can then compared to each other to determine the best campaign [1:28-45, 5:19-28, 13:45-57]. It would have been obvious to one of ordinary skill at the time of the invention to have provided multiple simultaneous filtering campaigns (each with their own sequences of conditions and randomly selected ad treatments) so that the best filtering campaign/approach can be measured and identified. It would have been obvious to one of ordinary skill at the time of the invention to have randomly assigned web visitors having ad requests/opportunities to each of the plural campaigns (groups) so that each campaign/group may be simultaneously tested in a scientific manner. The random assignment of users to each simultaneous campaign (group) would necessarily require providing information identifying a test group to which a user belongs in order to trigger the proper sequence of condition testing for each user. Although not believed to be a positive limitation in claim 15, the manner in which a user is assigned to a campaign (group) is done randomly to scientifically test the available campaigns and is not based on the user profile. Regarding the assignment of users to a subgroup, the random selection of filtered ads as taught by Langheinrich et al provides such a feature without a basis in the user profile. It would have been obvious to one of ordinary skill at the

time of the invention to have performed the random assignment of the user to each subgroup (random selection among filtered, applicable ad subgroups) before of after each condition is tested, as a matter of design choice.

Regarding claim 31, Langheinrich et al teaches that the system can keep track of the effectiveness for each ad. The system can then select to show the most effective ad in the subgroup of applicable ads [1:64 to 2:3]. Benson teaches that the effectiveness for each group of conditions (each campaign) can be measured and then compared against the other campaigns in the aggregate [13:45+]. It would have been obvious to one of ordinary skill at the time of the invention to have done such an analysis so that the most effective filtering campaign can be chosen and carried out further.

6. Claims 32-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Langheinrich et al (US6654725) in view of Benson (US6470079) and Lazarus et al (US6134532).

Regarding claim 32, Lazarus et al teaches targeted advertisement selection and in particular teaches tracking activity of identified users via a dynamic profile and using that profile information to select a targeted ad. It would have been obvious to one of ordinary skill at the time of the invention to have provided such user identification and behavior tracking in a profile that is used as a basis for the condition testing of Langheinrich et al in order to select a more effectively targeted ad. The proposed combination of teachings of Langheinrich et al and Benson provide motivation for group

and subgroup selection without regard to any user profile. While assignment to the selected group and subgroup using the user identifier is taken to be met merely by an identified user being treated with the chosen group and chosen subgroup, it would have been obvious to one of ordinary skill at the time of the invention to have identified a user having an ad opportunity and assigned the user to the selected group and subgroup using that identifier so that ad effectiveness and targeting effectiveness can be tracked, especially with regard to each user and user type/profile.

Regarding claim 33, Langheinrich et al teaches that the system can keep track of the effectiveness for each ad. The system can then select to show the most effective ad in the subgroup of applicable ads [1:64 to 2:3]. Benson teaches that the effectiveness for each group of conditions (each campaign) can be measured and then compared against the other campaigns in the aggregate [13:45+]. It would have been obvious to one of ordinary skill at the time of the invention to have done such an analysis so that the most effective filtering campaign can be chosen and carried out further.

Regarding claim 34, programming the system to make the random assignment of users to the groups and subgroups inherently "tends to conform the relative sizes" of the groups and subgroups to predetermined sizes if the assignments are truly randomly performed.

Response to Arguments

7. Applicant arguments filed 1/23/04 and during the interview of 9/23/04 are moot in view of the new grounds of art rejection.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Cannon (US6286005) teaches methods for analyzing and comparing various advertising campaigns.

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeffrey D. Carlson whose telephone number is 703-308-3402. The examiner can normally be reached on Mon-Fri 8:30-6p, (off on alternate Fridays).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eric Stamber can be reached on 703-305-8469. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Jeffrey D. Carlson
Primary Examiner
Art Unit 3622

jdc